

ABSTRACT

A multipole ion guide capable of incorporating a plurality of ion sources (i.e., MALDI, ESI, EI/CI, etc.) to provide and analyze ions in a mass analyzer (i.e., ICR, TOF, quadrupole, etc.) has been designed. Such multipole ion guides comprise an array of pairs of parallel conducting rods (i.e., 3 pair, 4 pair, 5 pair, etc.), each pair being equally spaced from one another, with the array being bound on its top and bottom as well as its ends by DC electrodes. The ion guide then utilizes RF/DC potentials to accept ions from any of a multitude of ion sources to facilitate their transmission through differentially pumped regions to a high pressure mass analysis region.